



Low gloss crosslinkable coating compositions

Description of Technology: The present invention is generally directed to low gloss coating compositions used as basecoats or clearcoats and more particularly directed to low gloss crosslinkable liquid coating compositions that produce low gloss coatings having smooth surfaces.

Patent Listing:

1. **US Patent No. 6,410,147**, Issued June 25, 2002, "Low gloss crosslinkable coating compositions"

<http://patft.uspto.gov/netacgi/nph-Parser?Sect2=PTO1&Sect2=HITOFF&p=1&u=%2Fnetacgi%2FPTO%2Fsearch-bool.html&r=1&f=G&l=50&d=PALL&RefSrch=yes&Query=PN%2F6410147>

Market Potential: Coating compositions have long been used to produce coatings having desired coating characteristics. For instance, coating compositions have been used to enhance surface appearance, such as providing high gloss or low gloss. High gloss surfaces reflect a high proportion of the light directed at them specularly. By contrast, low gloss surfaces reflect a low proportion of the light directed at them specularly. Low gloss coatings that produce less image impairment are aesthetically more pleasing. In the past, coating compositions relied on including flattening agents, such as amorphous silicon dioxide, to produce low gloss coatings. By increasing the loading of the flattening agent in a coating composition, the gloss can be reduced. To attain low gloss in clear coats, coating compositions have to be loaded with an excess amount, typically more than 6 weight percent based on the total weight of the composition of the flattening agent. Unfortunately, the flattening agent in these excessively loaded coating compositions tends to coagulate. As a result, the conventional low gloss coatings resulting therefrom have visually unacceptable seedy appearance. Furthermore, the presence of the excessive amount of these flattening agents in a coating composition tends to make the resultant coatings more brittle than conventional coating compositions. Thus, a need exists for durable low gloss coatings that do not have seedy appearance. The present invention addresses the problem of conventional low gloss coatings having a seedy appearance by producing low gloss coatings that have smooth surface.

Benefits:

- Reflect a low proportion of the light directed at them specularly

Applications:

- Low gloss coating compositions

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